Section 1. Registration Information

Source Identification

Facility Name:	BIC Consumer Products Manufacturing Co., Inc.
Parent Company #1 Name:	BIC USA Inc.
Parent Company #2 Name:	

Submission and Acceptance

Submission Type:	Re-submission
Subsequent RMP Submission Reason:	Voluntary update (not described by any of the above reasons)
Description:	
Receipt Date:	02-Mar-2018
Postmark Date:	02-Mar-2018
Next Due Date:	02-Mar-2023
Completeness Check Date:	02-Mar-2018
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

Facility Identification

EPA Facility Identifier:	1000 0013 0976
Other EPA Systems Facility ID:	
Facility Registry System ID:	

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	128835852
Parent Company #1 DUNS:	128694093
Parent Company #2 DUNS:	

Facility Location Address

Street 1:	565 BIC Drive
Street 2:	
City:	Milford
State:	CONNECTICUT
ZIP:	06461
ZIP4:	
County:	NEW HAVEN

Facility Latitude and Longitude

Latitude (decimal):	41.222222
Longitude (decimal):	-73.099444
Lat/Long Method:	Interpolation - Photo
Lat/Long Description:	Storage Tank
Horizontal Accuracy Measure:	25
Horizontal Reference Datum Name:	North American Datum of 1983

Source Map Scale Number:	24000

Owner or Operator

Operator Name:	BIC Consumer Products Mfg. Co., Inc
Operator Phone:	(203) 783-2747

Mailing Address

Operator Street 1:	565 BIC Drive
Operator Street 2:	
Operator City:	Milford
Operator State:	CONNECTICUT
Operator ZIP:	06461
Operator ZIP4:	
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person:	Mark Sullivan
RMP Title of Person or Position:	Director, Fac., Environment, Safety
RMP E-mail Address:	mark.sullivan@bicworld.com

Emergency Contact

Emergency Contact Name:	Mark Sullivan
Emergency Contact Title:	Director, Fac., Environment, Safety
Emergency Contact Phone:	(203) 783-2237
Emergency Contact 24-Hour Phone:	(203) 376-8616
Emergency Contact Ext. or PIN:	
Emergency Contact E-mail Address:	mark.sullivan@bicworld.com

Other Points of Contact

Facility or Parent Company E-mail Address:	
Facility Public Contact Phone:	(203) 783-2484
Facility or Parent Company WWW Homepage Address:	

Local Emergency Planning Committee

LEPC:	Milford LEPC

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site:	187
FTE Claimed as CBI:	

Covered By

OSHA PSM :	Yes
EPCRA 302 :	Yes

CAA Title V:
Air Operating Permit ID:

OSHA Ranking

OSHA Star or Merit Ranking:

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	07-May-2015
Last Safety Inspection Performed By an External Agency:	EPA

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:	Melanie Daniel
Preparer Phone:	(203) 783-2747
Preparer Street 1:	565 BIC Drive
Preparer Street 2:	
Preparer City:	Milford
Preparer State:	CONNECTICUT
Preparer ZIP:	06461
Preparer ZIP4:	
Preparer Foreign State:	
Preparer Foreign Country:	
Preparer Foreign ZIP:	

Confidential Business Information (CBI)

CBI Claimed:
Substantiation Provided:
Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.

Process Chemicals

Process ID:	1000080777
Description:	Lighter Fuel Operations
Process Chemical ID:	1000100625
Program Level:	Program Level 3 process
Chemical Name:	Isobutane [Propane, 2-methyl]
CAS Number:	75-28-5
Quantity (lbs):	184000
CBI Claimed:	
Flammable/Toxic:	Flammable

Process ID:	1000080778
Description:	Lighter Storage
Process Chemical ID:	1000100627
Program Level:	Program Level 1 process
Chemical Name:	Isobutane [Propane, 2-methyl]
CAS Number:	75-28-5
Quantity (lbs):	600000
CBI Claimed:	
Flammable/Toxic:	Flammable

Process NAICS

Process ID:	1000080777
Process NAICS ID:	1000082019
Program Level:	Program Level 3 process
NAICS Code:	339999
NAICS Description:	All Other Miscellaneous Manufacturing

Process ID:	1000080778
Process NAICS ID:	1000082021
Program Level:	Program Level 1 process
NAICS Code:	49311
NAICS Description:	General Warehousing and Storage

Section 2. Toxics: Worst Case

No records found.

Section 3. Toxics: Alternative Release

No records found.

Section 4. Flammables: Worst Case

Flammable Worst ID: 1000046880

Model Used:	EPA's RMP*Comp(TM)
Endpoint used:	1 PSI

Passive Mitigation Considered

Blast Walls:	Yes
Other Type:	

Flammable Worst ID: 1000046881

Model Used:	EPA's RMP*Comp(TM)
Endpoint used:	1 PSI

Passive Mitigation Considered

Blast Walls:	
Other Type:	

Section 5. Flammables: Alternative Release

Flammable Alter ID: 1000044336

Model Used:	EPA's RMP*Comp(TM)

Passive Mitigation Considered

Dikes:	
Fire Walls:	
Blast Walls:	Yes
Enclosures:	
Other Type:	

Active Mitigation Considered

Sprinkler System:	
Deluge System:	Yes
Water Curtain:	
Excess Flow Valve:	Yes
Other Type:	

Section 6. Accident History

No records found.

Section 7. Program Level 3

Description

See Executive Summary

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000084152
Chemical Name:	Isobutane [Propane, 2-methyl]
Flammable/Toxic:	Flammable
CAS Number:	75-28-5

Process ID:	1000080777
Description:	Lighter Fuel Operations
Prevention Program Level 3 ID:	1000067973
NAICS Code:	339999

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	09-Feb-2018

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	07-Nov-2014

The Technique Used

What If:	
Checklist:	
What If/Checklist:	
HAZOP:	Yes
Failure Mode and Effects Analysis:	
Fault Tree Analysis:	
Other Technique Used:	PHAWorks by Primatech, Inc.
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	15-Apr-2016

Major Hazards Identified

Toxic Release:	
Fire:	Yes
Explosion:	Yes
Runaway Reaction:	
Polymerization:	
Overpressurization:	
Corrosion:	
Overfilling:	Yes
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	

Earthquake:
Floods (Flood Plain):
Tornado:
Hurricanes:
Other Major Hazard Identified:

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	Yes
Alarms and Procedures:	Yes
Keyed Bypass:	Yes
Emergency Air Supply:	
Emergency Power:	Yes
Backup Pump:	Yes
Grounding Equipment:	Yes
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	Yes
Quench System:	
Purge System:	
None:	
Other Process Control in Use:	

Mitigation Systems in Use

Sprinkler System:	Yes
Dikes:	
Fire Walls:	
Blast Walls:	Yes
Deluge System:	Yes
Water Curtain:	
Enclosure:	Yes
Neutralization:	
None:	
Other Mitigation System in Use:	

Monitoring/Detection Systems in Use

Process Area Detectors:	Yes
Perimeter Monitors:	Yes
None:	
Other Monitoring/Detection System in Use:	

Changes Since Last PHA Update

Reduction in Chemical Inventory:
Increase in Chemical Inventory:
Change Process Parameters:

Installation of Process Controls:	Yes
Installation of Process Detection Systems:	Yes
Installation of Perimeter Monitoring Systems:	
Installation of Mitigation Systems:	
None Recommended:	
None:	
Other Changes Since Last PHA or PHA Update:	

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	09-Feb-2018

Training

Training Revision Date (The date of the most recent review or revision of training programs):	13-Nov-2017

The Type of Training Provided

Classroom:	Yes
On the Job:	Yes
Other Training:	

The Type of Competency Testing Used

Written Tests:	
Oral Tests:	
Demonstration:	Yes
Observation:	Yes
Other Type of Competency Testing Used:	

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):	09-Feb-2018
Equipment Inspection Date (The date of the most recent equipment inspection or test):	21-Feb-2018
Equipment Tested (Equipment most recently inspected or tested):	All gas detection heads

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):	23-Mar-2017
Change Management Revision Date (The date of the most recent review or revision of management of change procedures):	04-May-2012

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):	03-Apr-2017

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	13-Dec-2016
Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):	30-Nov-2017

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):	

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):	18-Oct-2016

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures):	06-Mar-2016

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):	06-Dec-2016
Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):	10-Jan-2017

Confidential Business Information

CBI Claimed:	

Section 8. Program Level 2

No records found.

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):	Yes
Facility Plan (Does facility have its own written emergency response plan?):	Yes
Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):	Yes
Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):	Yes
Healthcare (Does facility's ER plan include information on emergency health care?):	Yes

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan):	19-Dec-2017

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees):	09-Nov-2017

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated):	Milford Fire Department
Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):	(203) 874-6321

Subject to

OSHA Regulations at 29 CFR 1910.38:	Yes
OSHA Regulations at 29 CFR 1910.120:	Yes
Clean Water Regulations at 40 CFR 112:	Yes
RCRA Regulations at CFR 264, 265, and 279.52:	Yes
OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:	Yes
State EPCRA Rules or Laws:	Yes
Other (Specify):	

Executive Summary

Risk Management Plan
Executive Summary

BIC Consumer Products Manufacturing Co., Inc.
Milford, Connecticut

Stationary Source and Regulated Substance
BIC Consumer Products (BIC) manufactures lighters at 565 BIC Drive, Milford, Connecticut. The lighter manufacturing building is bordered by public roads, commercial and industrial properties. Activities include lighter production, engineering and administrative operations. Production operations at the facility include plastic and metal component manufacture, product assembly, packaging, storage and shipping. Lighters are filled with a liquefied petroleum gas, primarily composed of isobutane, which is a substance regulated under EPA's Chemical Accident Prevention Provisions (40 CFR Part 68). The lighter fuel operation is identified as Process 1 within the RMP. Process 1 is a Program Level 3 and consists of the storage and transfer of liquid petroleum gas (LP gas). LP Gas is stored in aboveground tanks located in a secure outdoor tank farm. A liquid transfer system pumps the LP gas through underground pipelines to lighter assembly machines in the building. The lighter assembly machines are located in specially designed rooms dedicated to lighter assembly. After assembly, lighters are then packaged and prepared for off-site shipment.

2018 Resubmission
BIC is resubmitting the RMP to voluntarily notify of a distinct second process, lighter storage (Process 2). Process 2 is considered a voluntary submission because finished lighters are articles, and therefore exempt from threshold determinations and reporting per 40 CFR Part 68.115(b)(3). Lighters have a specific shape and design which is integral to the function of the device, lighters do not release the regulated substance under normal conditions of storage, and therefore meet the definition of an Article under 40 CFR Part 68.3. BIC has recently increased the quantity of finished lighter storage with an expansion to a new warehouse at 500 BIC Drive (Building 4) which has prompted this resubmission. Lighter storage is a separate process because the finished, packaged product is not co-located near the lighter fuel operations, however it is included in this single RMP because Process 2 is contiguous and under the control of the same operator. This voluntary submission for finished lighter storage is for the benefit of local emergency responders and community awareness.

Five Year Accident History
BIC has not had a reportable accident in the last five years. BIC has been manufacturing lighters in the current facility since 1977 without a single incident involving a release of isobutane with on-site or off-site consequences, as described in 40 CFR 68.42 (a). This is one of many statistics that reflect a continuous corporate commitment to the safety and well-being of BIC employees and the community. BIC maintains a robust Incident Investigation program that examines even minor non-reportable incidents to ensure that corrective actions are implemented to avoid recurrence.

Accidental Release Prevention Program and Policies and Chemical Specific Prevention Steps (Program 3 Prevention Program)
Prevention of accidental releases at the facility is accomplished not only through compliance with EPA's Chemical Accident Prevention Provisions and other Federal and State regulations, but through application of long-standing corporate philosophies and initiatives which help support safe operations. For example, BIC's strong commitment to product quality results in continuous improvement of our manufacturing operations including state-of-the-art process design, control, and preventative maintenance. BIC's extensive in-line quality testing of every lighter not only guarantees safe and reliable operation of the product by the consumer, but also provides an additional measure of safety for the manufacturing operations. BIC's corporate commitment to safety and sound environmental management is translated into action by a full-time staff of trained Environmental, Health and Safety (EH&S) professionals. BIC's EH&S staff, along with lighter production staff, administer several programs which contribute to release prevention including safe work practices, employee training, preventative maintenance, process design and maintenance of numerous administrative and engineering controls designed to ensure that any safety concern is identified and addressed.
Safe work practices are documented in written operating procedures for production and maintenance personnel. Employee training is comprehensive, including training targeted to job-specific practices, as well as overview and awareness training in the various components of the risk management program. Training is typically a mix of on-the-job and classroom, conducted and documented by competent and experienced personnel. Employee understanding and competency is assessed.
Among BIC's administrative safety programs is the Management of Change Program, which requires a very detailed safety assessment and approval process for any significant change to equipment or safety systems associated with isobutane processing.
BIC's Contractor Safety Program is designed to ensure that contractors, including LP gas delivery drivers, are also trained in

relevant BIC operating and safety procedures. BIC conducts a Process Hazard Analysis at regular intervals, and as needed. This detailed, critical analysis of equipment, procedures, process parameters and potential deviations is used to identify opportunities for incremental safety improvements.

Numerous safety systems and controls have been incorporated into isobutane processing and lighter manufacturing operations. These include pressure regulators, various excess flow detection and shutoff devices, an extensive gas detection system, several ventilation systems, fire suppression systems and control of potential electrical ignition sources. In the event of an electric power failure, an emergency power generator maintains the operation of critical safety systems. A variety of sensors and interlocks provide process control and rapid, automatic response to releases or threats of releases. These responses include fuel shutoff, system shutdown, activation of fire suppression systems and facility evacuation.

Preventative maintenance programs focus on inspection and maintenance of process components including tanks, pumps, valves, controls, instruments and safety systems. In addition to helping ensure safe and reliable operation, the results of this program are used to identify opportunities for system improvement.

Emergency Response Program and Policies

BIC has implemented an Emergency Action Program which establishes detailed procedures for addressing potential emergencies including fires, explosions, accidental releases, power failures, natural disasters, bomb threats, civil disturbances, and medical emergencies. The plan designates primary and alternate Emergency Coordinators who are responsible for implementing the plan during an emergency. The plan also provides for emergency specific training of facility personnel. Emergency response to potential incidents at the facility have been coordinated with outside agencies. Site visits and joint training exercises have been conducted with the Milford Fire Department in order to familiarize Fire Department staff with BIC facilities and emergency procedures.

Emergency response steps that may be implemented in the event of a release of isobutane include manual and/or automatic activation of fire suppression systems, shutoff devices, ventilation systems and alarm systems. Other planned procedural actions range from simple leak repair by maintenance personnel to evacuation and response efforts coordinated with City emergency response officials. Although the details are beyond the scope of this brief summary, BIC maintains numerous safety systems, sensors, process interlocks and procedures designed to prevent incidents, and to provide safe and efficient response in the unlikely event of an emergency.

Planned Changes

In 2009, BIC completed significant upgrades to the isobutane unloading and tank filling process, storage tanks, and piping network, as well as installation of additional safety systems, gas monitoring devices and fire protection systems. BIC recently enhanced and continues to improve site security measures to further safeguard the facility and LP gas operations via improved fencing/gates/barriers, video surveillance, and expanded 24-hour security guard presence.